WHAT IS CLAIMED IS:

1. A native, authentic, enzymatically active NTPase/RNA helicase protein produced by a process comprising the steps of:

a) expressing an NTPase/RNA helicase encoding nucleic acid of hepatitis C virus in a eukaryotic expression system such that a complete, authentic and native NTPase/RNA helicase protein is synthesized, said authentic and native NTPase/RNA helicase protein comprising amino acids 1027 -1657;

b) extracting NTPase/RNA helicase protein from said eukaryotic expression system in an enzymatically active form of said protein; and

c) purifying said NTPase/RNA helicase protein such that the enzymatically active form of said protein is maintained.

2. The protein produced according to claim 1, said nucleic acid of hepatitis C virus in step a) corresponding to a human hepatitis C virus nucleic acid.

3. The protein produced according to claim 1, said nucleic acid of hepatitis C virus in step a) being derived from a genotype of the human hepatitis C virus nucleic acid.

4. The protein produced according to claim 1, wherein said nucleic acid of hepatitis C virus in step

a) is a variant of the human hepatitis C virus.

5. The protein produced according to claim 1, said nucleic acid of hepatitis C virus in step a) encoding a complete NS3 coding region.

6. The protein produced according to claim 1, said nucleic acid of hepatitis C virus in step a) encoding a complete NS3 through NS5B coding region comprising amino acid residues from 1027 to 3011 of hepatitis C virus genome.

7. The protein produced according to claim 1, wherein said expression system is a recombinant baculovirus-insect cell expression system.

8. The protein produced according to claim 1, wherein the extracted protein is purified by immunoaffinity chromatography using antibodies specific for hepatitis C virus proteins.

9. The protein produced according to claim 1, having basal NTPase activity in the range of 0-200 min^{-1} and RNA helicase activity greater than 0.001 min^{-1}.

10. The protein produced according to claim 1, having basal NTPase activity less than 150 min^{-1} and RNA helicase activity greater than 0.005 min^{-1}.

11. A process for preparing native, authentic, enzymatically active NTPase/RNA helicase protein comprisingthe steps of:

a) expressing an NTPase/RNA helicase encoding nucleic acid of hepatitis virus in a eukaryotic expression system such

that a complete, authentic and native NTPase/RNA helicase protein is synthesized, said authentic and native NTPase/RNA helicase protein comprising amino acids 1027-1657;

b) extracting NTPase/RNA helicase protein from said eukaryotic expression system in an enzymatically active form of said protein; and

c) purifying said NTPase/RNA helicase protein such that the enzymatically active form of said protein is maintained.

12. The process according to claim 11, said nucleic acid of hepatitis C virus in step a) corresponding to a complete NS3 coding region.

13. The process according to claim 11, said nucleic acid of hepatitis C virus in step a) corresponding to a complete NS3 through NS5B coding region.

14. A native, authentic, enzymatically active NTPase/RNA helicase protein product produced by a process comprising the steps of:

a) expressing a nucleic acid sequence in an expression system, thereby producing an enzymatically active, native, full length hepatitis C virus NTPase/RNA helicase protein that comprises the amino acid residues having sequence numbers from 1027 to and including 1657, wherein said expression system is a eukaryotic expression system;

b) extracting said protein from said expression system, such that the extracted protein is in an enzymatically active form;

c) purifying said extracted protein from step b) such that the purified protein is an enzymatically active, native, full-length hepatitis C virus NTPase/RNA helicase protein.

15. A method for assaying a compound for anti-viral activity against hepatitis C virus comprising:

a) providing enzymatically active, native, authentic hepatitis C virus NTPase/helicase protein;

b) contacting said protein with a compound suspected of inhibiting helicase activity; and

c) measuring inhibition of the helicase activity in said protein by said compound.

16. A method for assessing a compound for anti-viral activity against a flavivirus, comprising:

a) providing enzymatically active, native, authentic flavivirus helicase protein;

b) contacting said protein with a compound suspected of inhibiting helicase activity; and

c) measuring inhibition of the helicase activity in said protein by said compound.

17. A method as claimed in claim 15, wherein multiple compounds are assayed simultaneously.

18. A method for assaying a compound for anti-viral activity against hepatitis C virus comprising;

a) providing an enzymatically active, hepatitis C virus NTPase/RNA helicase protein;

b) providing a partially duplex substrate in which both strands are RNA and at least two nucleotides at the 3' end of at least one RNA strand are not involved in base pairing and at least one of said RNA strands is detectably labeled;

c) exposing said NTPase/RNA helicase protein to said partially duplex RNA substrate in the presence of a putative antiviral compound;

d) capturing any detectably labeled single stranded release strand product of the interaction between said RNA helicase protein and said substrate with a capture system comprising a specific binding pair, one member of said specific binding pair being conjugated with an oligonucleotide having a nucleotide sequence complementary to said detectably labeled release strand and the other member of said specific binding pair being affixed to a solid support; and

e) quantitating detectable label present in said release strand, as a measure of the anti-viral activity of said compound.

19. A method according to claim 18, wherein the other member of said specific binding pair is affixed to a mobile solid support.

20. A method according to claim 18 in which said oligonucleotide of said capture system is DNA.

21. A method according to claim 20 in which said capture system comprises said oligonucleotide conjugated with biotin and agarose beads coated with streptavidin or a derivative thereof.

22. A method as claimed in claim 18, wherein multiple compounds are assayed simultaneously.